

# MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

## *Epidemiologic Notes and Reports*

### **Heterosexual Transmission of Human T-Lymphotropic Virus Type III/Lymphadenopathy-Associated Virus**

Acquired immunodeficiency syndrome (AIDS) is caused by a virus that is known to be transmitted through sexual contact and parenteral exposure to blood or blood products and from mother to child during the perinatal period.

In the United States, sexual contact is believed to be the only risk factor for 8,374 (64%) of the 13,061 AIDS cases among adults reported to CDC as of September 16, 1985. These sexual-contact cases include 8,241 homosexual or bisexual men with no other known risk factors for infection and 133 heterosexual men and women.

The heterosexual-contact cases are among persons who denied belonging to known AIDS risk groups, but reported sexual contact with a risk-group member or an AIDS patient of the opposite sex. The proportion of AIDS patients placed in this category has not changed significantly over time ( $p > 0.15$ ). The 133 heterosexual-contact cases include 118 women and 15 men, the majority of whom said they had sexual contact with intravenous (IV) drug abusers.

No risk factors have been identified for HTLV-III/LAV infection in 829 of the total AIDS cases reported to CDC. Of these 829 patients, 344 were born in developing countries where AIDS is known to exist. The remaining 485 cases constitute a proportion of AIDS patients that has not changed significantly over time ( $p > 0.15$ ). Of these 485 patients with no identified risk, 99 were available for in-depth interviews. Twenty-three (34%) of the 68 men gave histories of sexual contact with female prostitutes. One (3%) of the 31 women gave a history of prostitution.

Serologic evidence of HTLV-III/LAV infection in female prostitutes has been shown in preliminary studies from several American cities. Of 92 prostitutes tested in Seattle, five (5%) had HTLV-III antibody detected by the enzyme immunoassay (EIA) tests of two manufacturers. In Miami, Florida, 10 (40%) of 25 prostitutes attending an AIDS screening clinic had HTLV-III antibody detected by both EIA and Western blot methods. Eight of the 10 seropositive women reported previous IV drug abuse.

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**Editorial Note:** Transmission of HTLV-III/LAV from heterosexual men to their female sexual partners has been well established in studies from the United States and elsewhere. Several published reports from the United States describe the occurrence of AIDS in heterosexual couples, where only the male partner had a known AIDS risk factor (1-3). A study in Rwanda and Belgium described AIDS or related conditions in 42 African women, including 10 prostitutes, who denied IV drug abuse (4).

**HTLV-III/LAV - Continued**

Studies of AIDS patients from several developing countries also indicate that female-to-male sexual transmission of HTLV-III/LAV infection occurs in those settings and emphasize the role of female prostitutes in this transmission. In Zaire, the ratio of male-to-female AIDS cases is 1.1:1 (5). A case-control study of heterosexual African men with AIDS or related conditions in Rwanda and Belgium showed a significant association of HTLV-III/LAV infection with a history of contact with prostitutes and with an increased number of female partners per year (4). A case-control study of Haitian men with AIDS in Miami and New York City showed a significant association of AIDS with a history of prostitute contact and with a history of sexually-transmitted diseases, suggesting that sexual contact may be a major method of transmission in these heterosexual men (6).

For persons born in the United States, female-to-male sexual transmission of HTLV-III/LAV has been less evident than male-to-female sexual transmission. The reasons for reported differences in the epidemiologic pattern of HTLV-III/LAV infections in the United States and certain developing countries are not clear. However, there are at least two possible explanations for the paucity of reported male "heterosexual contact" AIDS patients in the United States. First, female-to-male transmission of HTLV-III/LAV may be less efficient than male-to-female transmission, as has been reported for gonococcal infections (7,8). Second, the proportion of women among infected persons is relatively small. Of the 2,665 reported heterosexual AIDS patients with known risk factors in the United States, only 647 (24%) are women. The inclusion of 1,427 AIDS cases among bisexual men would further decrease the proportion of women among potential transmitters of infection. If the distribution of HTLV-III/LAV infected persons in the population is similar to the distribution of AIDS patients, infected heterosexual men would outnumber infected women by a ratio of 5:1.

While additional evidence for female-to-male transmission of HTLV-III/LAV in the United States is being sought, it would seem prudent to assume that such transmission occurs. In all other sexually transmitted infections, transmission is bidirectional, and HTLV-III/LAV appears to be spread bidirectionally in other populations. HTLV-III/LAV has been isolated from semen (9,10) and, presumably, would be present in the menstrual blood and the lymphocytes found in cervical and vaginal secretions of infected women. Attempts to isolate the virus from cervical and vaginal secretions are in progress.

All sexually active persons should realize that their risks of acquiring infection are greatly increased by having sexual intercourse with members of known AIDS risk groups or with persons who are the sexual contacts of risk-group members. Sexually active persons should also recognize that, as with other sexually transmitted diseases, the greater the number of sexual partners, the greater the risk of possible HTLV-III/LAV infection. Consistent use of condoms should assist in preventing infection with HTLV-III/LAV, but their efficacy in reducing transmission has not yet been proven.

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HTLV-III/LAV - *Continued*

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**Tetracycline-Resistant *Neisseria gonorrhoeae* —  
Georgia, Pennsylvania, New Hampshire**

Since February 1985, CDC has identified 12 isolates of *Neisseria gonorrhoeae* that have high-level resistance to tetracycline (minimal inhibition concentration [MIC] 24-32  $\mu$ g/ml) but are susceptible to penicillin. This high level of tetracycline resistance appears to be a new phenomenon.

Nine of the cases were reported from the metropolitan Atlanta, Georgia, area, and three, from Philadelphia, Pennsylvania. Ten of the patients were males: two were homosexual; six were heterosexual; and in two cases, sexual preference was not known. Two patients were heterosexual women. Positive cultures were obtained from urogenital sites. Six patients were initially treated with oral tetracycline alone. Five of these were reevaluated after therapy, and all were clinical treatment failures with positive test-of-cure cultures. Eight of the patients from whom information was available denied antibiotic use in the 2 weeks preceding their initial clinic visit.

Review of Sexually Transmitted Diseases Laboratory Program records at CDC over the previous 2 years identified one additional tetracycline-resistant *N. gonorrhoeae* (TRNG) case, reported from New Hampshire in 1983. This was a 28-year-old homosexual male who had positive posttreatment cultures from both the rectum and pharynx after initial treatment with tetracycline for gonococcal infection at those sites.

The identification of *N. gonorrhoeae* was confirmed by standard biochemical and immunologic methods. None of these strains produced  $\beta$ -lactamase. Isolates were tested at CDC by the agar dilution method for sensitivity to penicillin, ampicillin, tetracycline, minocycline, doxycycline, cefotaxime, cefuroxime, cefoxitin, spectinomycin, and trimethoprim/sulfamethoxazole. All were resistant to tetracycline (MIC 16-32  $\mu$ g/ml), doxycycline (MIC 8-24  $\mu$ g/ml), and minocycline (MIC 12-32  $\mu$ g/ml). The isolates were uniformly susceptible to penicillin (MIC 0.008-0.25  $\mu$ g/ml) and the other antibiotics tested. All the isolates were proline auxotrophs and belonged to serogroup IB with three distinct serovariants represented. Of the 13 isolates tested, all contained plasmids of approximately 24.5 and 2.6 megadaltons. Genetic analysis indicated that deoxyribonucleic acid (DNA) from these strains did not hybridize to a known enteric tetracycline resistance determinant, nor were these strains able to function as genetic donors of tetracycline resistance to sensitive strains of *N. gonorrhoeae* either by conjugation or by DNA-mediated transformation.

A prospective surveillance study was conducted in Dekalb County, Georgia. From August 15, to September 6, 1985, all *N. gonorrhoeae* isolates recovered by the Dekalb County Health Department were tested by CDC for their ability to grow on supplemented chocolate agar containing 2.5  $\mu$ g of tetracycline per ml. Isolates obtained through this screening procedure were further tested for antimicrobial susceptibility as above. Of 174 confirmed gonococcal isolates, six (3.4%) were found to have high-level resistance to tetracycline. Between Janu-

Neisseria gonorrhoeae — *Continued*

ary 1983 and December 1984, CDC determined MIC to tetracycline on over 9,500 gonococcal isolates, and with the exception of the New Hampshire case cited here, no TRNG were identified.

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**Editorial Note:** This is the first report of multiple isolates of *N. gonorrhoeae* resistant to tetracycline at this high level. Tetracycline resistance has usually been associated with penicillinase-producing strains (PPNG) (1) and with chromosomally resistant *N. gonorrhoeae* (CMRNG) (2,3). Strains exhibiting moderate levels of tetracycline resistance (MIC 1-8 µg/ml) have been noted previously. This type of resistance is thought to result from additive effects of mutations at three independent genetic loci (4,5). However, the inability of the TRNG strains cited in this report to function as donors of tetracycline resistance strongly suggests

(Continued on page 569)

TABLE I. Summary—cases of specified notifiable diseases, United States

| Disease                                              | 37th Week Ending  |                   |                     | Cumulative, 37th Week Ending |                   |                     |
|------------------------------------------------------|-------------------|-------------------|---------------------|------------------------------|-------------------|---------------------|
|                                                      | Sept. 14,<br>1985 | Sept. 15,<br>1984 | Median<br>1980-1984 | Sept. 14,<br>1985            | Sept. 15,<br>1984 | Median<br>1980-1984 |
| Acquired Immunodeficiency Syndrome (AIDS)            | 154               | 71                | N                   | 5,451                        | 2,844             | N                   |
| Aseptic meningitis                                   | 686               | 304               | 400                 | 5,715                        | 5,038             | 5,707               |
| Encephalitis: Primary (arthropod-borne<br>& unspec.) | 42                | 31                | 70                  | 738                          | 731               | 963                 |
| Post-infectious                                      | 1                 | 2                 | 2                   | 94                           | 89                | 71                  |
| Gonorrhea: Civilian                                  | 18,002            | 17,564            | 19,941              | 589,812                      | 585,230           | 675,726             |
| Military                                             | 448               | 345               | 542                 | 13,037                       | 15,244            | 19,229              |
| Hepatitis:                                           | 399               | 352               | 448                 | 15,389                       | 14,677            | 15,866              |
| Type A                                               | 484               | 497               | 411                 | 18,110                       | 17,955            | 15,148              |
| Type B                                               | 88                | 88                | N                   | 2,892                        | 2,659             | N                   |
| Non A, Non B                                         | 16                | 64                | 178                 | 4,011                        | 3,481             | 6,068               |
| Unspecified                                          | 19                | 24                | 24                  | 414                          | 456               | N                   |
| Legionellosis                                        | 22                | 9                 | 9                   | 2,428                        | 2,315             | 2,315               |
| Leprosy                                              | 3                 | 8                 | 4                   | 257                          | 162               | 162                 |
| Malaria                                              | 11                | 5                 | N                   | 2,012                        | 2,048             | N                   |
| Measles: Total*                                      | 11                | 5                 | N                   | 416                          | 267               | N                   |
| Indigenous                                           | 11                | 4                 | N                   | 2,428                        | 2,315             | 2,315               |
| Imported                                             | 2                 | 5                 | 12                  | 540                          | 550               | 1,760               |
| Meningococcal infections: Total                      | 25                | 18                | 34                  | 1,754                        | 2,043             | 2,045               |
| Civilian                                             | 25                | 18                | 34                  | 1,751                        | 2,039             | 2,039               |
| Military                                             | -                 | -                 | -                   | 3                            | 4                 | 13                  |
| Mumps                                                | 35                | 20                | 40                  | 2,213                        | 2,220             | 3,252               |
| Pertussis                                            | 81                | 85                | 37                  | 1,821                        | 1,617             | 1,165               |
| Rubella (German measles)                             | 2                 | 5                 | 12                  | 540                          | 550               | N                   |
| Syphilis (Primary & Secondary): Civilian             | 473               | 472               | 618                 | 17,872                       | 19,819            | 21,518              |
| Military                                             | 1                 | 4                 | 6                   | 104                          | 231               | 266                 |
| Toxic Shock syndrome                                 | 9                 | 11                | N                   | 264                          | 351               | N                   |
| Tuberculosis                                         | 421               | 468               | 507                 | 15,037                       | 14,922            | 17,836              |
| Tularemia                                            | 3                 | 5                 | 5                   | 112                          | 229               | 188                 |
| Typhoid fever                                        | 10                | 6                 | 11                  | 247                          | 237               | 296                 |
| Typhus fever, tick-borne (RMSF)                      | 28                | 19                | 27                  | 525                          | 681               | 967                 |
| Rabies, animal                                       | 97                | 114               | 119                 | 3,720                        | 3,848             | 4,588               |

TABLE II. Notifiable diseases of low frequency, United States

|                                                 | Cum 1985 |                                                     | Cum 1985 |
|-------------------------------------------------|----------|-----------------------------------------------------|----------|
| Anthrax                                         | -        | Leprosy                                             | 26       |
| Botulism: Foodborne                             | 35       | Plague                                              | 11       |
| infant                                          | 39       | Poliomyelitis: Total                                | 3        |
| Other                                           | 1        | Paralytic                                           | 3        |
| Brucellosis (Mo. 1, S. Dak. 1, Va. 1, Calif. 1) | 96       | Psittacosis (Mich. 1)                               | 81       |
| Cholera                                         | 3        | Rabies, human                                       | -        |
| Congenital rubella syndrome                     | -        | Tetanus (N.Y. City 1, Oreg. 1)                      | 46       |
| Congenital syphilis, ages < 1 year              | 111      | Trichinosis (Pa. 2)                                 | 50       |
| Diphtheria                                      | 1        | Typhus fever, flea-borne (endemic, murine) (Tex. 1) | 18       |

\*Four of the 22 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending September 14, 1985 and September 15, 1984 (37th Week)

| Reporting Area   | AIDS  | Aseptic<br>Meningitis | Encephalitis |                      |              | Gonorrhea<br>(Civilian) |              | Hepatitis (Viral), by type |      |        |                  | Legionel-<br>losis | Leprosy      |
|------------------|-------|-----------------------|--------------|----------------------|--------------|-------------------------|--------------|----------------------------|------|--------|------------------|--------------------|--------------|
|                  |       |                       | Primary      | Post-in-<br>fectious |              |                         |              | A                          | B    | NA, NB | Unspeci-<br>fied |                    |              |
|                  |       |                       | Cum.<br>1985 | 1985                 | Cum.<br>1985 | Cum.<br>1985            | Cum.<br>1984 | 1985                       | 1985 | 1985   | 1985             | 1985               | Cum.<br>1985 |
| UNITED STATES    | 5,451 | 566                   | 738          | 94                   | 589,812      | 585,230                 | 399          | 484                        | 88   | 104    | 20               | 257                |              |
| NEW ENGLAND      | 200   | 35                    | 21           | -                    | 16,192       | 16,195                  | 18           | 28                         | 4    | 11     | 1                | 6                  |              |
| Maine            | 9     | 1                     | -            | -                    | 793          | 693                     | -            | -                          | -    | -      | -                | -                  |              |
| N.H.             | -     | 1                     | 5            | -                    | 405          | 495                     | 1            | 1                          | -    | -      | -                | 1                  |              |
| Vt.              | -     | 2                     | -            | -                    | 231          | 273                     | -            | -                          | -    | -      | -                | 6                  |              |
| Mass.            | 123   | 20                    | 15           | -                    | 6,268        | 6,749                   | 3            | 13                         | 3    | 11     | -                | -                  |              |
| R.I.             | 9     | 10                    | -            | -                    | 1,323        | 1,083                   | 3            | 1                          | -    | -      | -                | -                  |              |
| Conn.            | 58    | 1                     | 1            | -                    | 7,172        | 6,902                   | 11           | 13                         | 1    | -      | -                | -                  |              |
| MID ATLANTIC     | 2,115 | 127                   | 104          | 11                   | 89,423       | 79,021                  | 22           | 52                         | 5    | 5      | -                | 24                 |              |
| Upstate N.Y.     | 260   | 59                    | 32           | 4                    | 12,111       | 12,006                  | 8            | 21                         | 2    | -      | -                | 1                  |              |
| N.Y. City        | 1,422 | 10                    | 12           | -                    | 44,683       | 32,369                  | -            | -                          | -    | -      | -                | 23                 |              |
| N.J.             | 307   | 35                    | 25           | -                    | 13,462       | 13,417                  | 9            | 12                         | 1    | 4      | -                | -                  |              |
| Pa.              | 126   | 23                    | 35           | 7                    | 19,167       | 21,229                  | 5            | 19                         | 2    | 1      | -                | -                  |              |
| E. N. CENTRAL    | 233   | 159                   | 177          | 18                   | 83,012       | 82,160                  | 14           | 46                         | 8    | 7      | 8                | 21                 |              |
| Ohio             | 43    | 84                    | 70           | 4                    | 21,519       | 21,596                  | 6            | 17                         | 3    | 3      | 4                | 3                  |              |
| Ind.             | 18    | 24                    | 37           | 2                    | 8,838        | 8,718                   | -            | 2                          | -    | -      | -                | 16                 |              |
| Ill.             | 114   | -                     | 14           | 7                    | 21,279       | 18,653                  | 4            | 4                          | -    | 2      | 1                | 4                  | 2            |
| Mich.            | 40    | 51                    | 38           | -                    | 23,307       | 24,017                  | 4            | 23                         | 5    | -      | -                | -                  |              |
| Wis.             | 18    | -                     | 18           | -                    | 8,069        | 9,176                   | -            | -                          | -    | -      | -                | -                  |              |
| W. N. CENTRAL    | 65    | 11                    | 55           | 3                    | 29,033       | 28,799                  | 11           | 13                         | -    | 1      | -                | 1                  |              |
| Minn.            | 21    | 1                     | 25           | 1                    | 4,289        | 4,364                   | -            | 8                          | -    | -      | -                | -                  |              |
| Iowa             | 8     | 3                     | 19           | -                    | 3,099        | 3,139                   | -            | -                          | -    | -      | -                | 1                  |              |
| Mo.              | 27    | 7                     | -            | -                    | 13,986       | 13,882                  | -            | 1                          | -    | 1      | -                | -                  |              |
| N. Dak.          | -     | -                     | -            | -                    | 1            | 193                     | 268          | 1                          | -    | -      | -                | -                  |              |
| S. Dak.          | -     | -                     | -            | -                    | 536          | 670                     | 5            | 1                          | -    | -      | -                | -                  |              |
| Nebr.            | 2     | -                     | 5            | -                    | 2,482        | 1,991                   | -            | 2                          | -    | -      | -                | -                  |              |
| Kans.            | 7     | -                     | 6            | 1                    | 4,446        | 4,485                   | 5            | 1                          | -    | -      | -                | -                  |              |
| S. ATLANTIC      | 837   | 71                    | 89           | 33                   | 130,148      | 148,871                 | 35           | 109                        | 16   | 13     | 2                | 6                  |              |
| Del.             | 10    | 8                     | 4            | -                    | 3,059        | 2,770                   | -            | -                          | -    | -      | 1                | -                  |              |
| Md.              | 102   | 10                    | 20           | 1                    | 20,739       | 17,103                  | 4            | 24                         | 1    | 2      | 1                | 1                  |              |
| D.C.             | 110   | -                     | -            | -                    | 10,890       | 10,622                  | -            | 2                          | -    | 2      | -                | -                  |              |
| Va.              | 67    | 24                    | 20           | 4                    | 13,420       | 14,081                  | 2            | 17                         | -    | 1      | -                | -                  |              |
| W. Va.           | 5     | 1                     | 20           | -                    | 1,848        | 1,834                   | 1            | -                          | -    | 1      | -                | 2                  |              |
| N.C.             | 40    | 10                    | 22           | -                    | 25,404       | 24,306                  | 1            | 7                          | 1    | 1      | -                | -                  |              |
| S.C.             | 21    | -                     | 3            | -                    | 15,642       | 14,926                  | 1            | 6                          | -    | -      | -                | 1                  |              |
| Ga.              | 130   | 7                     | -            | -                    | -            | 27,150                  | 9            | 12                         | 1    | -      | -                | 2                  |              |
| Fla.             | 352   | 13                    | -            | 28                   | 39,146       | 36,079                  | 17           | 41                         | 13   | 6      | -                | -                  |              |
| E. S. CENTRAL    | 47    | 31                    | 24           | 4                    | 52,988       | 51,751                  | 6            | 39                         | 6    | 1      | -                | -                  |              |
| Ky.              | 13    | 9                     | 8            | -                    | 6,033        | 6,271                   | -            | 6                          | -    | 1      | -                | -                  |              |
| Tenn.            | 15    | 3                     | 5            | -                    | 20,102       | 21,344                  | 3            | 25                         | 1    | -      | -                | -                  |              |
| Ala.             | 17    | 19                    | 9            | 4                    | 16,188       | 16,395                  | 3            | 7                          | 5    | -      | -                | -                  |              |
| Miss.            | 2     | -                     | 2            | -                    | 10,665       | 7,741                   | -            | 1                          | -    | -      | -                | -                  |              |
| W. S. CENTRAL    | 386   | 90                    | 94           | 2                    | 78,932       | 79,889                  | 73           | 48                         | 7    | 23     | 6                | 17                 |              |
| Ark.             | 5     | 2                     | 3            | -                    | 7,601        | 7,317                   | 1            | 4                          | 1    | 1      | -                | 1                  |              |
| La.              | 68    | 1                     | 3            | -                    | 15,471       | 17,867                  | 2            | 4                          | -    | 1      | -                | -                  |              |
| Okla.            | 11    | 3                     | 20           | 1                    | 8,647        | 8,762                   | 15           | 8                          | 2    | 6      | -                | -                  |              |
| Tex.             | 302   | 84                    | 68           | -                    | 47,213       | 45,943                  | 55           | 32                         | 4    | 16     | 6                | 15                 |              |
| MOUNTAIN         | 98    | 11                    | 28           | 6                    | 19,191       | 18,991                  | 84           | 37                         | 12   | 6      | 1                | 5                  |              |
| Mont.            | -     | -                     | -            | -                    | 541          | 789                     | 13           | 3                          | -    | 1      | -                | -                  |              |
| Idaho            | -     | -                     | -            | -                    | 598          | 934                     | 7            | 3                          | 1    | -      | -                | -                  |              |
| Wyo.             | -     | -                     | 1            | -                    | 430          | 527                     | 1            | -                          | -    | -      | -                | 1                  |              |
| Colo.            | 43    | 2                     | 6            | 2                    | 5,661        | 5,465                   | 15           | 8                          | 2    | 3      | -                | -                  |              |
| N. Mex.          | 12    | -                     | 3            | -                    | 2,218        | 2,242                   | 16           | 6                          | -    | -      | -                | -                  |              |
| Ariz.            | 26    | 5                     | 5            | -                    | 5,597        | 5,118                   | 19           | 10                         | 3    | 2      | 1                | 2                  |              |
| Utah             | 12    | 4                     | 10           | 4                    | 861          | 929                     | 5            | 3                          | 3    | -      | -                | 1                  |              |
| Nev.             | 5     | -                     | 3            | -                    | 3,285        | 2,987                   | 8            | 4                          | 3    | -      | -                | -                  |              |
| PACIFIC          | 1,470 | 31                    | 146          | 17                   | 90,893       | 79,553                  | 136          | 112                        | 30   | 37     | 2                | 177                |              |
| Wash.            | 79    | 11                    | 13           | -                    | 6,696        | 6,005                   | 4            | 5                          | 7    | -      | -                | 33                 |              |
| Oreg.            | 22    | -                     | 1            | -                    | 4,583        | 4,621                   | 24           | 7                          | 3    | -      | -                | 3                  |              |
| Calif.           | 1,348 | 16                    | 114          | 17                   | 76,202       | 65,569                  | 108          | 95                         | 20   | 37     | 2                | 122                |              |
| Alaska           | 3     | 1                     | 18           | -                    | 2,130        | 1,992                   | -            | 2                          | -    | -      | -                | 19                 |              |
| Hawaii           | 18    | 3                     | -            | -                    | 1,282        | 1,366                   | -            | 3                          | -    | -      | -                | -                  |              |
| P.R.             | 61    | 1                     | 4            | 2                    | -            | 2,350                   | 2,436        | 4                          | 11   | 4      | U                | U                  |              |
| V.I.             | 2     | U                     | -            | -                    | 312          | 395                     | U            | U                          | U    | U      | U                | U                  | 20           |
| Pac. Trust Terr. | -     | U                     | -            | -                    | 146          | -                       | U            | U                          | U    | U      | U                | U                  | 3            |

N: Not notifiable

U: Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending September 14, 1985 and September 15, 1984 (37th Week)

| Reporting Area   | Malaria | Measles (Rubella) |      |            |      |           | Meningococcal Infections | Mumps     |      | Pertussis |      |           | Rubella   |      |           |           |
|------------------|---------|-------------------|------|------------|------|-----------|--------------------------|-----------|------|-----------|------|-----------|-----------|------|-----------|-----------|
|                  |         | Indigenous        |      | Imported * |      | Total     |                          | 1985      |      | 1985      |      | 1985      |           | 1985 |           |           |
|                  |         | Cum. 1985         | 1985 | Cum. 1985  | 1985 | Cum. 1985 |                          | Cum. 1985 | 1985 | Cum. 1985 | 1985 | Cum. 1984 | Cum. 1985 | 1985 | Cum. 1985 | Cum. 1984 |
| UNITED STATES    |         | 711               | 11   | 2,012      | 11   | 416       | 2,315                    | 1,784     | 35   | 2,213     | 81   | 1,821     | 1,617     | 2    | 540       | 550       |
| NEW ENGLAND      |         | 38                | -    | 38         | -    | 86        | 104                      | 78        | -    | 51        | 7    | 101       | 43        | -    | 12        | 18        |
| Maine            |         | 4                 | -    | -          | -    | 1         | -                        | 2         | -    | 6         | 3    | 8         | 2         | -    | -         | 1         |
| N.H.             |         | 4                 | -    | -          | -    | -         | 36                       | 12        | -    | 9         | -    | 39        | 7         | -    | 2         | 1         |
| Vt.              |         | 1                 | -    | -          | -    | 7         | 9                        | -         | 2    | -         | 3    | 19        | -         | -    | -         | -         |
| Mass.            |         | 18                | -    | 34         | -    | 84        | 48                       | 13        | -    | 14        | 3    | 31        | 12        | -    | 6         | 16        |
| R.I.             |         | 3                 | -    | -          | -    | -         | -                        | 13        | -    | 13        | 1    | 13        | 2         | -    | -         | -         |
| Conn.            |         | 8                 | -    | 4          | -    | 3         | 13                       | 29        | -    | 7         | -    | 7         | 1         | -    | 4         | -         |
| MID ATLANTIC     |         | 111               | -    | 168        | -    | 34        | 144                      | 308       | 17   | 244       | 3    | 113       | 138       | 1    | 216       | 213       |
| Upstate N.Y.     |         | 36                | -    | 71         | -    | 13        | 32                       | 121       | 1    | 132       | 1    | 52        | 74        | -    | 17        | 99        |
| N.Y. City        |         | 40                | -    | 55         | -    | 8         | 100                      | 50        | 14   | 26        | -    | 16        | 6         | 1    | 176       | 96        |
| N.J.             |         | 14                | -    | 17         | -    | 10        | 7                        | 47        | 1    | 30        | 1    | 5         | 11        | -    | 9         | 17        |
| Pa.              |         | 21                | -    | 25         | -    | 3         | 5                        | 90        | 1    | 54        | 1    | 40        | 47        | -    | 14        | 1         |
| E.N. CENTRAL     |         | 34                | 1    | 428        | 5    | 83        | 891                      | 310       | 2    | 831       | 17   | 351       | 410       | -    | 27        | 82        |
| Ohio             |         | 7                 | -    | -          | -    | 52        | 9                        | 102       | 2    | 246       | 15   | 53        | 64        | -    | 2         | 2         |
| Ind.             |         | 3                 | -    | 49         | -    | 2         | 3                        | 40        | -    | 36        | -    | 98        | 225       | -    | 1         | 5         |
| Ill.             |         | 5                 | 1    | 286        | -    | 5         | 179                      | 69        | -    | 179       | -    | 26        | 23        | -    | 10        | 48        |
| Mich.            |         | 13                | -    | 37         | 58   | 23        | 461                      | 71        | -    | 289       | 2    | 35        | 25        | -    | 15        | 19        |
| Wis.             |         | 8                 | -    | 56         | -    | 1         | 39                       | 28        | -    | 81        | -    | 139       | 82        | -    | 1         | 8         |
| W.N. CENTRAL     |         | 27                | -    | 1          | -    | 10        | 46                       | 88        | -    | 66        | 1    | 140       | 110       | -    | 19        | 34        |
| Minn.            |         | 11                | -    | -          | -    | 6         | 38                       | 23        | -    | 1         | -    | 69        | 12        | -    | 2         | 4         |
| Iowa             |         | 2                 | -    | -          | -    | -         | -                        | 8         | -    | 10        | -    | 6         | 10        | -    | 1         | 1         |
| Mo.              |         | 5                 | -    | -          | -    | 2         | 3                        | 34        | -    | 11        | -    | 26        | 18        | -    | 7         | -         |
| N. Dak.          |         | 2                 | -    | -          | -    | 2         | -                        | 4         | -    | 3         | -    | 9         | -         | -    | 2         | 3         |
| S. Dak.          |         | 1                 | -    | -          | -    | -         | -                        | 2         | -    | -         | -    | 2         | 8         | -    | -         | -         |
| Nebr.            |         | 1                 | -    | -          | -    | -         | -                        | 7         | -    | 2         | -    | 4         | 11        | -    | -         | -         |
| Kans.            |         | 5                 | -    | 1          | -    | -         | 5                        | 10        | -    | 39        | 1    | 24        | 51        | -    | 7         | 26        |
| S. ATLANTIC      |         | 88                | 2    | 267        | 4    | 28        | 50                       | 339       | 3    | 206       | 6    | 292       | 167       | -    | 54        | 22        |
| Del.             |         | -                 | -    | -          | -    | -         | -                        | 8         | -    | 1         | -    | 2         | -         | 1    | -         | -         |
| Md.              |         | 22                | 1    | 94         | 2†   | 9         | 20                       | 47        | -    | 27        | -    | 124       | 53        | -    | 6         | 1         |
| D.C.             |         | 5                 | -    | 9          | -    | 1         | 8                        | 6         | -    | -         | -    | 1         | -         | -    | -         | -         |
| Va.              |         | 19                | -    | 21         | 28   | 7         | 5                        | 41        | -    | 41        | -    | 11        | 18        | -    | 2         | -         |
| W. Va.           |         | 2                 | -    | 31         | -    | 2         | -                        | 8         | -    | 57        | -    | 4         | 11        | -    | 9         | -         |
| N.C.             |         | 8                 | -    | 9          | -    | -         | -                        | 46        | -    | 11        | 1    | 21        | 23        | -    | -         | -         |
| S.C.             |         | -                 | -    | -          | -    | 1         | 1                        | 34        | -    | 7         | -    | 2         | 2         | -    | 3         | -         |
| Ga.              |         | 6                 | -    | 8          | -    | -         | 1                        | 56        | -    | 28        | 5    | 82        | 14        | -    | 4         | 2         |
| Fla.             |         | 26                | 1    | 95         | -    | 8         | 15                       | 93        | 2    | 34        | -    | 47        | 44        | -    | 29        | 19        |
| E.S. CENTRAL     |         | 9                 | -    | -          | -    | 7         | 3                        | 80        | -    | 23        | 4    | 37        | 12        | -    | 2         | 9         |
| Ky.              |         | 3                 | -    | -          | -    | 5         | 1                        | 8         | -    | 8         | -    | 6         | 1         | -    | 2         | 3         |
| Tenn.            |         | -                 | -    | -          | -    | 1         | 2                        | 31        | -    | 13        | -    | 16        | 7         | -    | -         | -         |
| Ala.             |         | 5                 | -    | -          | -    | -         | -                        | 25        | -    | 4         | 11   | -         | -         | -    | 3         | -         |
| Miss.            |         | 1                 | -    | -          | -    | 1         | -                        | 16        | -    | 2         | 4    | 4         | -         | -    | -         | 3         |
| W.S. CENTRAL     |         | 67                | -    | 412        | -    | 13        | 533                      | 146       | 2    | 230       | 28   | 292       | 274       | -    | 32        | 6         |
| Ark.             |         | 1                 | -    | -          | -    | -         | 8                        | 13        | 1    | 5         | -    | 12        | 18        | -    | 1         | 3         |
| La.              |         | 1                 | -    | 42         | -    | -         | 8                        | 22        | -    | 2         | -    | 11        | 6         | -    | -         | -         |
| Okla.            |         | 2                 | -    | -          | -    | 1         | 8                        | 28        | N    | N         | 1    | 125       | 235       | -    | 1         | -         |
| Tex.             |         | 63                | -    | 370        | -    | 12        | 509                      | 83        | 1    | 223       | 27   | 144       | 15        | -    | 30        | 3         |
| MOUNTAIN         |         | 37                | -    | 487        | -    | 51        | 145                      | 75        | 3    | 206       | 4    | 145       | 97        | -    | 5         | 17        |
| Mont.            |         | -                 | -    | 122        | -    | 17        | -                        | 5         | -    | 9         | -    | 8         | 19        | -    | -         | -         |
| Idaho            |         | 2                 | -    | 126        | -    | 18        | 23                       | 2         | -    | 9         | 1    | 5         | 7         | -    | 1         | 1         |
| Wyo.             |         | 1                 | -    | -          | -    | -         | -                        | 6         | -    | 2         | -    | -         | 3         | -    | -         | -         |
| Colo.            |         | 11                | -    | 6          | -    | 7         | 6                        | 21        | 1    | 17        | 3    | 53        | 34        | -    | 2         | 2         |
| N. Mex.          |         | 13                | -    | 1          | -    | 5         | 88                       | 8         | N    | N         | -    | 12        | 6         | -    | 2         | -         |
| Ariz.            |         | 5                 | -    | 232        | -    | 4         | 1                        | 19        | 1    | 100       | -    | 27        | 20        | -    | 1         | 1         |
| Utah             |         | 2                 | -    | -          | -    | -         | 27                       | 8         | -    | 6         | -    | 40        | 6         | -    | 7         | -         |
| Nev.             |         | 3                 | -    | -          | -    | -         | 6                        | 1         | 63   | -         | -    | 2         | -         | 1    | 4         | -         |
| PACIFIC          |         | 300               | 8    | 211        | 2    | 102       | 599                      | 330       | 8    | 356       | 11   | 350       | 357       | 1    | 173       | 149       |
| Wash.            |         | 19                | -    | 28         | -    | 38        | 139                      | 58        | 1    | 30        | 2    | 60        | 160       | -    | 11        | 1         |
| Oreg.            |         | 12                | 1    | 4          | -    | 1         | -                        | 30        | N    | N         | -    | 40        | 14        | -    | 1         | 2         |
| Calif.           |         | 252               | 7    | 164        | 2†   | 58        | 303                      | 230       | 7    | 303       | 4    | 204       | 111       | 1    | 118       | 141       |
| Alaska           |         | 2                 | -    | -          | -    | -         | -                        | 8         | -    | 8         | -    | 29        | 1         | -    | 1         | 1         |
| Hawaii           |         | 15                | -    | 15         | -    | 5         | 157                      | 4         | -    | 15        | 5    | 17        | 71        | -    | 42        | 4         |
| Guam             |         | 1                 | U    | 10         | U    | 1         | 90                       | -         | U    | 5         | U    | -         | -         | U    | 1         | 4         |
| P.R.             |         | -                 | -    | 54         | -    | 10        | 12                       | 1         | 131  | 3         | U    | -         | 10        | U    | 25        | 8         |
| V.I.             |         | -                 | U    | 4          | U    | 6         | -                        | -         | U    | 3         | U    | -         | -         | U    | -         | -         |
| Pac. Trust Terr. |         | -                 | U    | -          | U    | -         | -                        | -         | U    | 3         | U    | -         | -         | U    | -         | -         |

\*For measles only. Imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable

†International

‡Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending September 14, 1985 and September 15, 1984 (37th Week)

| Reporting Area   | Syphilis (Civilian)<br>(Primary & Secondary) |              | Toxic-<br>shock<br>Syndrome | Tuberculosis |              | Tula-<br>remia | Typhoid<br>Fever | Typhus Fever<br>(Tick-borne)<br>(RMSF) | Rabies,<br>Animal |
|------------------|----------------------------------------------|--------------|-----------------------------|--------------|--------------|----------------|------------------|----------------------------------------|-------------------|
|                  | Cum.<br>1985                                 | Cum.<br>1984 |                             | 1985         | Cum.<br>1985 |                |                  |                                        |                   |
| UNITED STATES    | 17,872                                       | 19,619       | 9                           | 15,037       | 14,922       | 112            | 247              | 525                                    | 3,720             |
| NEW ENGLAND      | 308                                          | 366          | 1                           | 517          | 427          | 3              | 10               | 7                                      | 19                |
| Maine            | 12                                           | 4            | -                           | 36           | 21           | -              | -                | -                                      | -                 |
| N.H.             | 29                                           | 12           | 1                           | 13           | 25           | -              | -                | 1                                      | 1                 |
| Vt.              | 5                                            | 1            | -                           | 5            | 7            | -              | -                | -                                      | -                 |
| Mass.            | 191                                          | 211          | -                           | 315          | 228          | 3              | 7                | 5                                      | 11                |
| R.I.             | 12                                           | 15           | -                           | 38           | 30           | -              | -                | 1                                      | -                 |
| Conn.            | 149                                          | 123          | -                           | 110          | 116          | -              | 3                | -                                      | 7                 |
| MID ATLANTIC     | 2,500                                        | 2,670        | 2                           | 2,772        | 2,727        | 2              | 36               | 19                                     | 371               |
| Upstate N.Y.     | 181                                          | 230          | -                           | 486          | 441          | -              | 9                | 9                                      | 84                |
| N.Y. City        | 1,533                                        | 1,642        | 1                           | 1,330        | 1,084        | 1              | 19               | 3                                      | -                 |
| N.J.             | 490                                          | 474          | -                           | 383          | 611          | 1              | 7                | 3                                      | 34                |
| Pa.              | 296                                          | 324          | 1                           | 573          | 591          | -              | 1                | 4                                      | 253               |
| E.N. CENTRAL     | 738                                          | 921          | -                           | 1,859        | 1,968        | 1              | 29               | 38                                     | 137               |
| Ohio             | 106                                          | 174          | -                           | 326          | 370          | -              | 6                | 28                                     | 25                |
| Ind.             | 67                                           | 95           | -                           | 226          | 235          | -              | 3                | 2                                      | 19                |
| Ill.             | 362                                          | 315          | -                           | 789          | 815          | 1              | 13               | 6                                      | 27                |
| Mich.            | 156                                          | 285          | -                           | 409          | 422          | -              | 5                | 2                                      | 20                |
| Wis.             | 47                                           | 52           | -                           | 109          | 126          | -              | 2                | -                                      | 46                |
| W.N. CENTRAL     | 159                                          | 280          | 1                           | 418          | 464          | 34             | 10               | 35                                     | 704               |
| Minn.            | 33                                           | 77           | -                           | 91           | 78           | 1              | 6                | -                                      | 141               |
| Iowa             | 17                                           | 11           | 1                           | 44           | 48           | -              | 2                | 1                                      | 125               |
| Mo.              | 80                                           | 142          | -                           | 205          | 235          | 21             | 1                | 3                                      | 36                |
| N. Dak.          | 2                                            | 9            | -                           | 7            | 11           | -              | -                | 1                                      | 100               |
| S. Dak.          | 5                                            | -            | -                           | 19           | 17           | 7              | -                | 2                                      | 236               |
| Nebr.            | 6                                            | 11           | -                           | 11           | 22           | 2              | 1                | 3                                      | 30                |
| Kans.            | 16                                           | 30           | -                           | 41           | 53           | 3              | -                | 25                                     | 36                |
| S. ATLANTIC      | 4,568                                        | 5,806        | 1                           | 3,021        | 3,113        | 6              | 26               | 258                                    | 941               |
| Del.             | 28                                           | 14           | -                           | 27           | 38           | 1              | -                | 3                                      | -                 |
| Md.              | 304                                          | 363          | -                           | 269          | 301          | -              | 9                | 26                                     | 453               |
| D.C.             | 245                                          | 237          | -                           | 118          | 132          | -              | -                | -                                      | -                 |
| Va.              | 215                                          | 293          | -                           | 266          | 334          | 1              | 3                | 17                                     | 133               |
| W. Va.           | 15                                           | 13           | -                           | 81           | 96           | -              | -                | 1                                      | 22                |
| N.C.             | 478                                          | 606          | -                           | 382          | 464          | 4              | 2                | 106                                    | 11                |
| S.C.             | 582                                          | 552          | -                           | 368          | 371          | -              | 1                | 66                                     | 55                |
| Ge.              | -                                            | 993          | -                           | 512          | 447          | -              | 2                | 33                                     | 142               |
| Fla.             | 2,701                                        | 2,735        | 1                           | 998          | 930          | -              | 9                | 6                                      | 125               |
| E.S. CENTRAL     | 1,467                                        | 1,351        | -                           | 1,335        | 1,372        | 5              | 4                | 51                                     | 185               |
| Ky.              | 47                                           | 72           | -                           | 321          | 330          | -              | 1                | 7                                      | 26                |
| Tenn.            | 452                                          | 368          | -                           | 377          | 425          | 4              | 1                | 25                                     | 45                |
| Ala.             | 451                                          | 447          | -                           | 405          | 409          | 1              | 2                | 12                                     | 109               |
| Miss.            | 517                                          | 464          | -                           | 232          | 208          | -              | -                | 7                                      | 5                 |
| W.S. CENTRAL     | 4,306                                        | 4,801        | -                           | 1,845        | 1,713        | 40             | 21               | 100                                    | 639               |
| Ark.             | 225                                          | 152          | -                           | 198          | 189          | 22             | -                | 13                                     | 104               |
| La.              | 750                                          | 859          | -                           | 264          | 222          | -              | -                | 1                                      | 12                |
| Okl.             | 123                                          | 156          | -                           | 184          | 166          | 13             | 2                | 75                                     | 83                |
| Tex.             | 3,208                                        | 3,634        | -                           | 1,199        | 1,136        | 5              | 19               | 11                                     | 440               |
| MOUNTAIN         | 502                                          | 437          | 2                           | 396          | 401          | 14             | 11               | 14                                     | 313               |
| Mont.            | 5                                            | 2            | -                           | 46           | 17           | 4              | -                | 6                                      | 142               |
| Idaho            | 4                                            | 19           | -                           | 18           | 24           | -              | -                | -                                      | 8                 |
| Wyo.             | 8                                            | 7            | -                           | 5            | -            | -              | -                | 8                                      | 16                |
| Colo.            | 125                                          | 117          | -                           | 42           | 50           | 2              | 4                | 2                                      | 21                |
| N. Mex.          | 94                                           | 58           | 1                           | 70           | 80           | 2              | 4                | -                                      | 9                 |
| Ariz.            | 232                                          | 156          | -                           | 177          | 178          | 4              | 3                | -                                      | 108               |
| Utah             | 6                                            | 14           | 1                           | 12           | 30           | 2              | -                | -                                      | 3                 |
| Nev.             | 28                                           | 64           | -                           | 26           | 22           | -              | -                | 2                                      | 6                 |
| PACIFIC          | 3,234                                        | 2,987        | 2                           | 2,874        | 2,737        | 7              | 100              | 3                                      | 511               |
| Wash.            | 90                                           | 114          | -                           | 168          | 140          | -              | -                | -                                      | 4                 |
| Oreg.            | 67                                           | 81           | -                           | 93           | 108          | 1              | -                | -                                      | 4                 |
| Calif.           | 3,035                                        | 2,733        | 2                           | 2,405        | 2,293        | 4              | 96               | 3                                      | 400               |
| Alaska           | 2                                            | 4            | -                           | 72           | 45           | 2              | -                | -                                      | 3                 |
| Hawaii           | 50                                           | 55           | -                           | 136          | 151          | -              | 4                | -                                      | -                 |
| Guam             | 2                                            | -            | U                           | 27           | 40           | -              | -                | -                                      | -                 |
| P.R.             | 569                                          | 575          | -                           | 243          | 270          | -              | 2                | -                                      | 31                |
| V.I.             | 1                                            | 8            | U                           | 1            | 3            | -              | 52               | -                                      | -                 |
| Pac. Trust Terr. | 13                                           | -            | U                           | 16           | -            | -              | -                | -                                      | -                 |

U. Unavailable

**TABLE IV. Deaths in 121 U.S. cities,\* week ending September 14, 1985 (37th Week)**

*\*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fatal deaths are not included.*

#### \*\* Pneumonia and influenza

† Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

<sup>11</sup>Total includes unknown ages.

§ Data not available. Figures are

**TABLE V. Years of potential life lost, deaths, and death rates, by cause of death, and estimated number of physician contacts, by principal diagnosis, United States**

| Cause of morbidity or mortality<br>(Ninth Revision ICD, 1975)          | Years of potential life lost before age 65 by persons dying in 1983-† | Estimated mortality |                         | Estimated number of physician contacts April 1985-‡ |
|------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------|-------------------------|-----------------------------------------------------|
|                                                                        |                                                                       | Number-§            | Annual Rate/100,000-§   |                                                     |
| <b>ALL CAUSES (TOTAL)</b>                                              | <b>9,170,000</b>                                                      | <b>182,380</b>      | <b>933.1</b>            | <b>117,700,000</b>                                  |
| Accidents and adverse effects (E800-E949)                              | 2,219,000                                                             | 7,410               | 37.9                    | 7,000,000                                           |
| Malignant neoplasms (140-208)                                          | 1,808,000                                                             | 38,930              | 199.2                   | 2,000,000                                           |
| Diseases of heart (390-398, 402, 404-429)                              | 1,559,000                                                             | 68,780              | 351.9                   | 6,200,000                                           |
| Suicides, homicides (E950-E978)                                        | 1,218,000                                                             | 3,950               | 20.2                    | -                                                   |
| Chronic liver disease and cirrhosis (571)                              | 248,000                                                               | 2,350               | 12.0                    | 200,000                                             |
| Cerebrovascular diseases (430-438)                                     | 226,000                                                               | 13,840              | 70.8                    | 500,000                                             |
| Congenital anomalies (740-759)                                         | 134,000                                                               | 1,210               | 6.2                     | 300,000                                             |
| Chronic obstructive pulmonary diseases and allied conditions (490-496) | 123,000                                                               | 6,490               | 33.2                    | 1,700,000                                           |
| Diabetes mellitus (250)                                                | 115,000                                                               | 3,280               | 16.8                    | 3,100,000                                           |
| Pneumonia and influenza (480-487)                                      | 106,000                                                               | 6,060               | 31.0                    | 1,100,000                                           |
| Prenatal care*                                                         |                                                                       |                     |                         | 3,200,000                                           |
| Infant mortality††                                                     |                                                                       | 3,300               | 10.6 /1,000 live births |                                                     |

\*For details of calculation, see footnotes for Table V, MMWR 1985;34:2.

†Years of potential life lost for persons between 1 year and 65 years old at the time of death are derived from the number of deaths in each age category as reported by the National Center for Health Statistics, *Monthly Vital Statistics Report* (MVSRI), Vol. 32, No. 13, September 21, 1984.§National Center for Health Statistics, *Monthly Vital Statistics Report* (MVSRI), Vol. 34, No. 5, August 21, 1985, pp. 8-9.\*IMS America *National Disease and Therapeutic Index* (NDTI), Monthly Report, April 1985, Section III.

††MVSRI Vol. 34, No. 4, July 19, 1985, p. 1.

***Neisseria gonorrhoeae — Continued***

that this is a new type of resistance and does not result from previously described genetic determinants. Although all TRNG isolates to date have been sensitive to penicillin, preliminary data indicate that they may have the capability to acquire and maintain a  $\beta$ -lactamase plasmid.

The magnitude of the tetracycline MICs reported here, and their association with treatment failures, raises public health concerns, since tetracycline (minocycline, doxycycline) is sometimes used as the sole therapy for gonococcal genital infections and as neonatal prophylaxis for ophthalmia neonatorum.

**Neisseria gonorrhoeae — Continued**

In light of this new development, CDC strongly urges that all positive test-of-cure cultures be screened for tetracycline resistance by disk diffusion in addition to recommended procedures for PPNG and CMRNG testing (3,6). All gonococcal isolates with an inhibitory zone of less than 30 mm to a 30 µg tetracycline disc on supplemented chocolate agar should be submitted to a reference laboratory for confirmation by agar dilution techniques. The 1985 CDC *Sexually Transmitted Diseases Treatment Guidelines* (7) will emphasize that tetracycline (minocycline, doxycycline) therapy alone should be used only in patients with reported penicillin allergy. These patients should be strongly encouraged to return for a posttreatment evaluation.

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**Perspectives in Disease Prevention and Health Promotion****Suicide and Suicide Attempts by the Nonmedical Use of Drugs**

For 1983, the Drug Abuse Warning Network (DAWN) was notified of 2,975 deaths attributed to drug abuse and 108,585 drug abuse incidents. Although it is not a population-based surveillance system, DAWN, sponsored by the National Institute on Drug Abuse, monitors nonmedical use of drugs through 76 medical examiner facilities and 760 emergency rooms (1).

Of the 2,975 deaths related to drug abuse, 1,097 (37%) were classified as suicides. Attempted suicides were reported for 42,294 (39%) of the drug abuse incidents. More than half (53%) of persons whose deaths were attributed to suicide by drug overdose were female; 67% of persons attempting suicide by drug overdose were female. Death by drug overdose occurred in an older age group than did suicide attempt by drug overdose: 71% of deaths were among persons older than 30 years, whereas approximately 40% of persons attempting suicide were older than 30 years.

Alcohol in combination with some other substance was most commonly used in both suicides and suicide attempts reported to DAWN (Table 1). Alcohol was involved in 21% of suicides and 20% of suicide attempts. Amitriptyline, a prescription antidepressant, was used in 16% of suicides but only 4% of suicide attempts.

*Reported by Div of Epidemiology and Statistical Analysis, National Institute on Drug Abuse, ADAMHA; Violence Epidemiology Br, Center for Health Promotion and Education, CDC.*

**Editorial Note:** DAWN is a large data base but is neither a representative sample nor a population-based registry. Therefore, rates for drug-related suicides and suicide attempts cannot be calculated, and generalizations based on DAWN data may not be valid. DAWN data

***Suicide — Continued***

complement vital statistics information for suicide and provide additional clarification of drug-related suicide attempts by listing specific substances ingested.

Nonmedical use of drugs is cited as the method most frequently used in suicide attempts (2). However, suicide by self-poisoning (International Classification of Diseases, 9th Revision, E950), which includes nonmedical use of drugs, is decreasing in frequency in the United States (3). Between 1970 and 1980, suicide by self-poisoning decreased from 17% to 11% of all suicides. The total number of suicides has increased during the same period (3).

The high frequency of aspirin and acetaminophen ingestion reported in suicide attempts underscores the availability of these nonprescription drugs. Among prescription drugs used, amitriptyline, seldom abused for psychic effects, was the most frequently mentioned prescription substance used for suicide in DAWN reporting. Persons committing suicide by amitriptyline overdose are likely to have been in treatment for depression; depression is a significant risk factor for suicide (4). Limiting the number of pills per prescription, writing only non-refillable prescriptions, and scheduling frequent office visits to assess patient response and to inquire about suicidal thoughts may help reduce deaths from antidepressant overdose.

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**TABLE 1. The most frequently used substances ingested during suicide attempts and suicides**

| Rank | Suicide attempts                  | Suicides                          |
|------|-----------------------------------|-----------------------------------|
| 1    | Alcohol combined with other drugs | Alcohol combined with other drugs |
| 2    | Diazepam                          | Amitriptyline                     |
| 3    | Aspirin                           | d-Propoxyphene                    |
| 4    | Acetaminophen                     | Diazepam                          |
| 5    | Other, unspecified tranquilizers  | Acetaminophen                     |

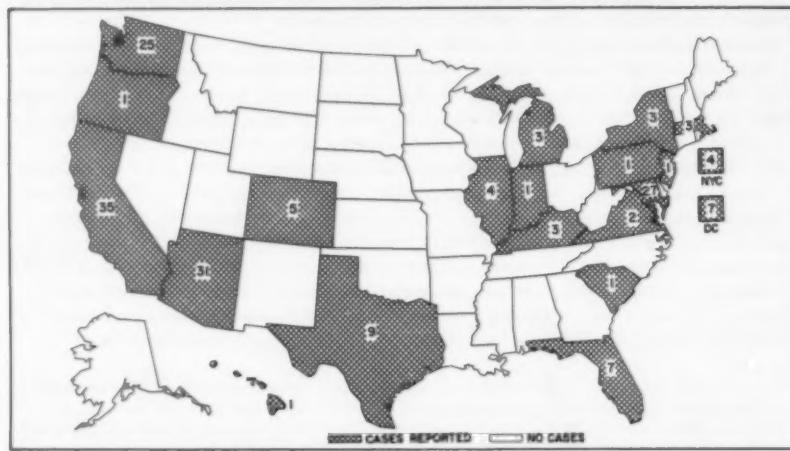
***Epidemiologic Notes and Reports***

**Restaurant-Associated Botulism — Vancouver, British Columbia**

One proven and 20 suspect cases of botulism in Canada and the western United States have been associated with eating at the White Spot Restaurant on Georgia Street in downtown Vancouver between August 27 and September 11, 1985. The patients have experienced onset of symptoms up to 10 days following exposure. Physicians should be aware of the outbreak and are requested to report suspect cases to local and state public health authorities.

*Reported by Health Protection Br, Dept of National Health and Welfare, Ottawa, Canada; Emergency and Epidemiological Operations Br, U.S. Food and Drug Administration; Enteric Diseases Br, Div of Bacterial Diseases, Center for Infectious Diseases, CDC.*

FIGURE I. Reported measles cases — United States, weeks 33-36, 1985



The *Morbidity and Mortality Weekly Report* is prepared by the Centers for Disease Control, Atlanta, Georgia, and available on a paid subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 783-3238.

The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matter pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

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U.S. Government Printing Office: 1985-746-149/21017 Region IV

DEPARTMENT OF  
HEALTH & HUMAN SERVICES  
Public Health Service  
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Atlanta GA 30333

Official Business  
Penalty for Private Use \$300



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